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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/280,152	03/26/1999	WILLIAM D. GENTRY	SN0197CIP	5366

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EXAMINER

HARPER, KEVIN C

ART UNIT PAPER NUMBER

2666

DATE MAILED: 08/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/280,152

Applicant(s)

GENTRY ET AL.

Examiner

Kevin C. Harper

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-10,20,28-30 and 40-42 is/are allowed.
- 6) ☒ Claim(s) 1-7,11-19,21-27,31-39 and 43-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Response to Arguments

Applicant's arguments filed June 10, 2004 have been fully considered but they are not persuasive.

1. Applicant argued that Lu in view of Baldwin does not provide support for a motivation to combine for interconnecting base stations and a PSTN over large distances. However, the ATM network of Baldwin (Figure 1) that connects the PSTN and base stations is used for standardized trunking (col. 1, lines 16-25) as is known in the art to interconnect various networks over large distances.
2. Applicant argued that Lu in view of Baldwin does not provide support for a motivation to combine for supporting handoffs among base stations connected to a packet network. However, Baldwin describes adjusting network routing parameters in order to properly route data after a handoff has taken place (Figure 8, step 620 and 625; Figure 7).
3. Applicant argued that Lu in view of Baldwin (and Focarile) does not disclose a mapping between an end office protocol and a packet protocol. However, in Baldwin the packets in the ATM network are inherently mapped to an end office protocol such that the voice information within ATM packets is correctly associated with respective destination user telephone line at an end office within the PSTN (col. 5, lines 50-53). Similarly, in Focarile packets are mapped to an end office protocol such that packetized voice information is transmitted to the proper destination user telephone line (Figure 2, item 22, 32, 216, 212, 210, and 46) of an end office within the PSTN.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-7, 13-19, 21-27, 33-39, 45 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu et al. (US 5,953,651) in view of Baldwin et al (US 5,729,536).

4. Regarding claims 1, 13, 21, 33, 45 and 47, Lu discloses a method of providing end office wireline telephony services to wireless subscribers (Figure 1; abstract, lines 1-4) such that the wireless call can utilize all of the wireline services associated with an end office telephony switching network (abstract, lines 13-22). However, Lu does not disclose mapping a subscriber's wireless telephony protocol to a packet data network protocol or managing the subscriber's wireless mobility services for a wireless call. Baldwin discloses an ATM network for connecting cellular users (Figure 4) where the wireless telephony protocol is inherently mapped to a data packet network protocol (col. 5, lines 56-61) and the mobility of the wireless subscriber is managed (Figure 8, steps 620 and 625; col. 8 lines 14-20) whereby call origination or termination messages are transmitted to a control node of the ATM network (Figures 4-5, item 99; col. 5, lines 53-55). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have a packet network in the invention and manage the mobility of wireless subscribers in the packet network in the invention of Lu in order to interconnect a base station and a PSTN across large distances using a common and widely available backbone data network and to properly manage communications in the packet network among base stations performing handoff, respectively. Further regarding claim 33, the operations of Lu and Baldwin are inherently performed using computer programming.

5. Regarding claims 2-7, 14-19, 22-27 and 34-39, Lu does not disclose mapping a base station controller protocol to a call control protocol used by a packet network. Baldwin discloses inherently mapping a base station controller protocol (col. 5, lines 56-61) to a call control protocol utilized by the packet network (col. 5, lines 53-56), sending call origination messages to or call

termination messages from a gateway device (Figure 5, items 130-140; col. 5, lines 53-56 and 61-63; col. 6, lines 33-37) providing access to an end office telephony switch (item 150), inherently mapping the call control protocol to the end office access protocol (col. 5, lines 50-53), originating a call using the end office access protocol (col. 5, lines 50-53 and 56-59; col. 7, lines 60-62) and routing the call between the end office telephony switch and a base station (col. 6, lines 32-37). A virtual speech path represents a virtual channel assigned temporarily to the call (col. 6, lines 32-37; Figure 8, step 635). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have a data network interconnect a base station and a PSTN in the invention of Lu in order to interconnect the base station and PSTN across large distances using a common and widely available backbone data network or to provide an inexpensive means to interconnect the base station and PSTN.

6. Regarding claims 46 and 48-51, Lu in view of Baldwin does not disclose using the various claimed standardized protocols. Examiner takes Official Notice that appropriate standardized protocols are used in a given network. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to use the IP protocol in the data network and IS-634 as the wireless protocol in the wireless network in the invention of Lu in view of Baldwin, or an H.323 protocol, a Session Initiation Protocol, or a Multi-Gateway Control Protocol (Media Gateway Control Protocol) as signaling protocols in the invention of Lu in view of Baldwin in order to achieve desired network operating characteristics and in order to have interoperability, availability or lower cost of network components using the standardized protocols.

Claims 11-12, 31-32 and 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu in view of Baldwin, as applied to claim 1, 21 or 33 above, and further in view of Focarile (US 5,434,854).

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7. Regarding claims 11, 31 and 43, Lu in view of Baldwin does not disclose simulcasting speech to a current base station and a target base station. Focarile discloses transmitting call information between a destination and two base stations (Figure 5, steps 510 and 540-560). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to simulcast call information to two base stations in the invention of Lu in view of Baldwin in order to achieve seamless soft handover in a packet network (Focarile, Figure 1; col. 10, lines 7-12).

8. Regarding claims 12, 32 and 44, Lu in view of Baldwin does not disclose simulcasting speech to a current base station and a target base station. Focarile discloses transmitting call information between a destination and two base stations (Figure 5, steps 510 and 540-560) based on signal strength messages in the cellular network (col. 9, lines 14-17) and handoff messages in the cellular network and packet network (col. 9, lines 31-47). The handoff is completed as necessary (col. 10, lines 2-5). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to simulcast call information to two base stations during handoff in the invention of Lu in view of Baldwin in order to achieve seamless soft handover in a packet network (Focarile, Figure 1; col. 10, lines 7-12).

Allowable Subject Matter

9. Claims 8-10, 20, 28-30 and 40-42 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 703-305-0139 (as of August 25,

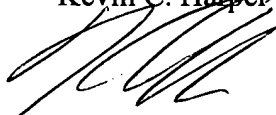
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2004, the number will be 571-272-3166). The examiner can normally be reached weekdays from 11:30 AM to 8:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 703-308-5463 (as of August 25, 2004, the number will be 571-272-3174). The centralized fax number for the Patent Office is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only (applications must be associated with a customer number). For more information about the PAIR system, see pair.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin C. Harper



August 22, 2004



DANG TON
PRIMARY EXAMINER